

Docket No. 740756-2669  
 Serial No. 10/700,719  
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**IN THE SPECIFICATION:**

Please corrected the specification as follows:

Page 12, second full paragraph, please amend the formula as follows:

From formulas (2), (3), (7) and (8), the following formula is obtained.

$$V_{th}-V_{fb}=(e \cdot N_d / C_{ox}) \cdot [(4 \epsilon_0 \cdot \epsilon_{Si} \cdot kT) / (e^2 \cdot N_d) \cdot \ln(N_d / n_i)] \cdot \frac{(4 \epsilon_0 \cdot \epsilon_{Si} \cdot kT) / (e^2 \cdot N_d) \cdot \ln(N_d / n_i)}{+ (2kT / e) \cdot \ln(N_d / n_i)} \quad (9)$$

Page 12, third full paragraph, continuing on page 13.

From formula (9), it will be understood that the activated dopant density  $N_d$  can be obtained if values are given to  $V_{th}$  and  $V_{fb}$ . However, formula (9) cannot be solved analytically and is necessary to be solved numerically. Since  $N_d$  and  $n_i$  are of great values indicated by indexes, calculation will be easier if the formula is modified as the following formula in numerical calculation to reduce the dimension of the variables.

$$V_{th}-V_{fb}=(e \cdot n_i / C_{ox}) (N_d / n_i) \cdot [(4 \epsilon_0 \cdot \epsilon_{Si} \cdot kT) / (e^2 \cdot (N_d / n_i) \cdot n_i) \cdot \ln(N_d / n_i)] \cdot \frac{(4 \epsilon_0 \cdot \epsilon_{Si} \cdot kT) / (e^2 \cdot (N_d / n_i) \cdot n_i) \cdot \ln(N_d / n_i)}{+ (2kT / e) \cdot \ln(N_d / n_i)} \quad (10)$$

In actual calculation,  $N_d / n_i$  is set as a variable, and  $N_d / n_i$  is obtained such that the left side and the right side of formula (10) become an equal value.